

Claims **WHAT IS CLAIMED IS:**

1. Color organic display (OLED display) with pixels ~~(1)~~, which comprise ~~in each case a~~ subpixel set ~~(2, 3, 4)~~ with the colors, red, green, and blue, ~~having comprising:~~
  - 5    [[-]]    a substrate ~~(5)~~, which is at least partially transparent to visible light,
  - [[-]]    a structured color filter ~~(6)~~, which generates the colors of the subpixels ~~(2, 3, 4)~~ and is subsequently arranged on the substrate ~~(5)~~,
  - [[-]]    a first electrode ~~(7, 9)~~ ~~subsequently arranged on the color filter (6)~~, which is at least partially transparent to visible light,
  - 10    [[-]]    at least one active layer ~~(8)~~ ~~subsequently arranged on the first electrode (7, 9)~~, containing an emissive material, which is suitable for the generation of electromagnetic radiation, whose spectrum is matched to the color filter ~~(6)~~ such that the pixels ~~(1)~~ during control with the same electrical signal emit light whose color location lies within the white region of the CIE diagram, and
  - 15    [[-]]    a second electrode ~~(7, 9)~~ ~~subsequently arranged on the active layer (8)~~.
2. ~~Organic~~ The organic display according to claim 1, wherein the emissive material contains polymers with:
  - [[-]]    first chromophores ~~(10)~~, which produce a green color impression, and
  - 20    [[-]]    second chromophores ~~(11)~~, which produce a red color impression.
3. ~~Organic~~ The organic display according to claim 2, wherein the polymers contain chromophores ~~(12)~~, which produce a blue color impression.
- 25    4. ~~Organic~~ The organic display according to any one of the preceding claims, ~~whose~~ wherein the first electrode (7, 9) is an anode and comprises ITO indium tin oxide.

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5. The organic ~~Organic~~ display according to ~~any one of the preceding claims~~ claim 1, wherein the active layer ~~(8)~~ contains at least one polyspiro ~~compounds~~ compound.
- 5 6. The organic ~~Organic~~ display according to ~~any one of the preceding claims~~ claim 1, wherein the active layer ~~(8)~~ contains at least one polyfluorene ~~compound~~ compounds.
7. The organic ~~Organic~~ display according to ~~any one of the preceding claims~~ claim 1, wherein the individual subpixels ~~(2, 3, 4)~~ of the subpixel set have the same lifetime.
- 10 8. ~~Use~~ A method of using an organic display with color filter technology ~~(6)~~ according to ~~any one of the preceding claims~~ claim 1 in electronics.
9. ~~A method~~ Use of using an organic display with color filter technology ~~(6)~~ according to ~~any one of the preceding claims~~ claim 1 for lighting purposes with adjustable color.
- 15 10. The organic display according to claim 1, wherein the at least one active layer comprises a blue-emitting polymer with red chromophores and blue chromophores covalently coupled to the blue-emitting polymer.
- 20 11. The organic display according to claim 1, wherein the at least one active layer comprises a blue-emitting polymer blended with red chromophores and blue chromophores.
- 25 12. An organic device, comprising:  
a substrate that is at least partially transparent to visible light,  
a structured colored filter having a plurality of fields, wherein each field corresponds to a colored subpixel, and a red subpixel, a blue subpixel and a green subpixel form a pixel,  
a first electrode on the colored filter,  
an active layer on the first electrode, comprising an emissive material that is capable of emitting electromagnetic radiation, and  
a second electrode on the active layer.
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wherein, upon driving the red subpixel, the blue subpixel and the green subpixel with a single selected current, the pixel is a white light pixel.

13. The organic device of claim 12, wherein:

5     the structured colored filter includes pigments and the emissive material for the blue subpixel is the emissive material for the red subpixel.

14. The organic device of claim 12, wherein the emissive material comprises a blue-emitting polymer with red chromophores and blue chromophores covalently coupled

10    to the blue-emitting polymer.

15. The organic device of claim 12, wherein the emissive material comprises a blue-emitting polymer blended with red chromophores and blue chromophores.

15    16. The organic device of claim 12, wherein the emissive material comprises a polyspiro compound.

17. The organic device of claim 12, wherein the emissive material comprises a polyfluorene compound.

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